

COMPOUNDS AND KITS FOR PREPARING IMAGING AGENTS AND METHODS OF IMAGING

ABSTRACT

Compounds that include a targeting moiety bound to a regioselective leaving group are useful for preparing imaging agents. The imaging agents can be isolated from by-products derived from the leaving group based on differences in the chemical attributes (e.g., net charge or polarity) of the molecules or physical attributes of the molecules through the use of a solid support. Methods of producing an imaging agent include the steps of providing a compound that includes a targeting moiety bound to a support via a linker group that contains a site for regioselective substitution of a detectable species, contacting the compound with a solution containing the detectable species, and recovering the imaging agent. Kits which include a first container having therein a solution containing a detectable species and a second container having therein a compound that includes a targeting moiety bound to a support via a leaving group that contains a site for regioselective substitution of the detectable species are also useful for preparing imaging agents.